Case 3039

Thamnotettix nigropictus Stål, 1870 (currently Nephotettix nigropictus; Insecta, Homoptera): proposed conservation of the specific name

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Abstract. The purpose of this application is to conserve the specific name of *Nephotettix nigropictus* (Stål, 1870), an Asian cicadellid leafhopper which is a vector of virus diseases of rice. *Pediopsis nigromaculatus* Motschulsky, 1859 has been identified as a senior synonym of *N. nigropictus*, but its introduction would cause confusion in the extensive economic literature and its suppression is proposed.

Keywords. Nomenclature; taxonomy; Homoptera; CICADELLOIDEA; Nephotettix nigropictus; Pediopsis nigromaculatus; leafhoppers; rice pests.

- 1. Stål (1870, p. 740) described the rice leafhopper *Thanmotettix nigropicta* (recte *nigropictus*, since *tettix* is masculine) from the Philippines. Ghauri (1971) revised the cicadellid genus *Nephotettix* Matsumura, 1902, in which the species is now placed, and reported (p. 482) that the male holotype and a female 'allotype' are well preserved in the Riksmuseum, Stockholm (specimens 345,69 and 346,69 respectively). Ghauri used the 'well-defined and authentic concept' of *nigropictus* Stål as the valid name for the species.
- 2. Motschulsky (1859, p. 111) described *Pediopsis nigromaculatus* from Ceylon (now Sri Lanka). The type material in Moscow consists of fragments (see para. 4 below).
- 3. Ghauri (1971) was aware that the description of *Pediopsis nigromaculatus* by Motschulsky would place this nominal species in *Nephotettix*, but he had been informed that the type material had been destroyed and accordingly treated the name as a nomen dubium. Five species of *Nephotettix* are known from Sri Lanka; the correct determination of the species is reliant on the male genitalia, although wing and body coloration is accurate for many specimens of both sexes.
- 4. Vilbaste (1975, p. 233) found 'two fragments of fore wings, the end of a female abdomen and three fragments of the thorax with legs' of *P. nigromaculatus* in the remains of Motschulsky's collection in the Zoological Institute of Moscow State University. He concluded that the markings of the fore wings showed that this material was conspecific with *Nephotettix nigropictus*, and he noted that the original description of *P. nigromaculatus* was in accord with that of *N. nigropictus*. Vilbaste accordingly synonymised *nigropictus* Stål, 1870 with *nigromaculatus* Motschulsky, 1859.

- 5. Nephotettix species are vectors of pathogenic plant viruses; they are major pests of rice in Asia and elsewhere in the Old World, and the literature is considerable. Various names for the more important species were used before the revision by Ghauri (1971) stabilised the economic literature. Since 1975 (the date of the synonymy made by Vilbaste) there have been at least 500 publications which have used the name Nephotettix nigropictus; some recent examples are Inoue (1986), Cook & Perfect (1989), Heong, Aquino & Barrion (1991) and Waterhouse (1993), and a list of a further 20 has been given to the Commission Secretariat. In contrast to this, the synonymy by Vilbaste appears to have been cited in just two catalogues of Australian leafhoppers, those by Evans (1977, p. 118) and Day & Fletcher (1994, p. 1208). Wilson & Claridge (1991) were aware of the synonymy, but in their handbook they used (p. 82) the name N. nigropictus (Stål, 1870) because of the extensive economic literature. Any further resurrection of the barely used name nigromaculatus Motschulsky, 1859 would cause very considerable confusion in the literature concerning rice pests.
- 6. The International Commission on Zoological Nomenclature is accordingly asked:
 - (1) to use its plenary powers to suppress the name *nigromaculatus* Motschulsky, 1859, as published in the binomen *Pediopsis nigromaculatus*, for the purposes of the Principle of Priority but not for those of the Principle of Homonymy;
 - (2) to place on the Official List of Specific Names in Zoology the name *nigropictus* Stål, 1870, as published in the binomen *Thannotettix nigropicta* [sic];
 - (3) to place on the Official Index of Rejected and Invalid Specific Names in Zoology the name *nigromaculatus* Motschulsky, 1859, as published in the binomen *Pediopsis nigromaculatus* and as suppressed in (1) above.

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